

# **New Vistas in Low-Energy Precision Physics (LEPP)**

**Monday, April 4, 2016 - Thursday, April 7, 2016**

**Kupferbergterrasse Mainz**

## **Scientific Program**

Nucleon form factors / proton radius

**Carl Carlson** (William and Mary)  
Theoretical status of proton radius puzzle

**Haiyan Gao** (Duke Univ)  
The proton charge radius and the PRad experiment at Jefferson Lab

**Jan Bernauer** (MIT)  
Precision Form Factor Measurements in Electron-Nucleon Scattering

**Guy Ron** (Jerusalem)  
The MUSE experiment

**Keith Griffioen** (William and Mary)  
Efficacy of a Radial Time Projection Chamber for Tests of Lepton Universality

**Hai-Bo Li** (IHEP Beijing)  
Possible experiments with the Internal Gas Target at the BEPCII

**Miha Mihovilovic** (Ljubliana/Mainz)  
The initial state radiation experiment at MAMI

**Alexey Vorobyev** (Gatchina)  
A proposal for high precision measurements of e-p differential cross sections at small t-values using an active target.

Polarizabilities

**Judith McGovern** (Univ Manchester)  
Theoretical status of nucleon polarizabilities

**Evgeny M. Maev** (Gatchina)  
Future prospects for polarizability measurements

**Rory Miskimen** (Amherst)  
Spin polarizabilities

**Hélène Fonvieille** (Univ Clermont)  
Virtual Compton Scattering and Generalized Polarizabilities: Experimental Status

**Dave Hornidge** (Mt Allison Univ)

## Polarizability Measurements at A2/MAMI

**Nicole d'Hose** (CEA Saclay)  
DVCS overview

**Vladimir Pascalutsa** (Mainz)  
From nucleon Compton scattering to muonic hydrogen and back

## Dark photons and dark matter

**Maxim Pospelov** (Perimeter)  
Dark photon and dark matter: theoretical motivations

**Maurik Holtrop** (New Hampshire)  
The Heavy Photon Search experiment at Jefferson Lab

**Ross Corliss** (MIT)  
Dark light

**Marco Battaglieri** (Univ Genova)  
BDX

**Harald Merkel** (Univ. Mainz)  
Dark photon experiments at Mainz

**Enrico Graziani** (Roma 3)  
Kloe results

**Paolo Valente** (Roma 1)  
Dark photon searches in positron annihilations with the PADME experiment

## Few-body physics

**Evgeny Epelbaum** (Univ Bochum)  
Theoretical overview of nuclear EFT

**Jacek Golak** (Univ. Krakow)

## Electron scattering off few body systems: theory meets experiment

### Nuclear astrophysics

**Achim Schwenk** (Univ. Darmstadt)

Atomic nuclei: from fundamental interactions to structure and stars

**Norbert Pietralla** (Univ. Darmstadt)

Plans at the S-DALINAC

**Philipp Scholz** (Köln)

Radiative capture and photodisintegration reactions for the synthesis of the p nuclei

**Joachim Enders** (Univ. Darmstadt)

Polarization Expts. at Darmstadt

**Claudio Ugalde** (Chicago)

JLab experiment

**Davide Trezzi** (Milano)

Nuclear reactions of astrophysical interest at LUNA

### Meson Physics

**Emilie Passemar** (U. Indiana)

Overview of tau decays

**Graziano Venanzoni** (LNF)

Measuring  $a_{\mu}^{\text{HLO}}$  in the spacelike region

**Guangshun Huang** (USTC)

Timelike Form Factor Measurements at BESIII

**Alberto Lusiani** (Univ Pisa)

Tau-decays: experiment

**Massimo Passera** (Padova)

Spacelike measurements for HVP theory

**Yuping Guo** (Mainz)

The hadronic contributions on  $g-2$

Detector Design

**Stefano Caiazza** (Mainz)

The MAGIX experiment

**Alfons Khoukaz** (Münster)

Jet target

**Bernhard Ketzer** (Univ Bonn)

GEM+TPC

**Eric Voutier** (IPN Orsay)

Positron production

**Annalisa d'Angelo** (Univ. Rome, tbc)

HD frozen spin target